

Appl. No. 09/920,342  
Amdt. Dated September 12, 2006  
Reply to Office Action of June 12, 2006

Attorney Docket No. 89188.0022  
Customer No. 26021

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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1.-31. (Canceled)

32. (Currently Amended) A method for inhibiting the expression of a target gene in a cell that expresses the targeted gene, comprising the steps of:

a) providing a composition comprising an mRNA-cDNA hybrid duplex prior to contacting said cell, wherein the mRNA-cDNA hybrid duplex is capable of inhibiting the expression of said targeted gene in said cell; and

b) contacting said cell with said composition under conditions such that the expression of said gene in said cell is inhibited,

wherein the mRNA is a ribonucleic acid sequence in the sense orientation of said targeted gene and the cDNA is a deoxyribonucleic acid sequence in the anti-sense orientation of said targeted gene. and wherein the mRNA-cDNA hybrid duplex forms between said mRNA and said cDNA in a complementary region containing more than 500 base pairs.

33. (Canceled)

34. (Previously Presented) The method of Claim 32, wherein said cell expresses said targeted gene *in vivo*.

35. (Original) The method of Claim 32, wherein said targeted gene comprises a gene selected from the group consisting of pathogenic nucleic acids, viral genes, mutated genes, and oncogenes.

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36. (Previously Presented) The method of Claim 32, wherein said mRNA-cDNA hybrid duplex inhibits  $\beta$ -catenin expression.

37. (Canceled)

38. (Previously Presented) The method of Claim 32, wherein said cell is a prokaryotic cell.

39. (Canceled)

40. (Previously Presented) The method of Claim 38, wherein said cell is a bacterial cell.

41. (Previously Presented) The method of Claim 32, wherein said cell is a cell of an eukaryote.

42. (Original) The method of Claim 41, wherein said eukaryote is a vertebrate.

43. (Original) The method of Claim 41, wherein said eukaryote is a mouse.

44. (Original) The method of Claim 41, wherein said eukaryote is chimpanzee.

45. (Original) The method of Claim 41, wherein said eukaryote is a human being.

46.-54. (Canceled)

55. (Previously Presented) The method of Claim 32, wherein the composition consists of an mRNA-cDNA hybrid duplex capable of inhibiting the expression of said targeted gene.

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56.-57. (Canceled)

58. (Previously Presented) The method of Claim 55, wherein said cell expresses said targeted gene *in vivo*.

59. (Previously Presented) The method of Claim 55, wherein said targeted gene comprises a gene selected from the group consisting of pathogenic nucleic acids, viral genes, mutated genes, and oncogenes.

60. (Previously Presented) The method of Claim 55, wherein said mRNA-cDNA hybrid duplex inhibits  $\beta$ -catenin expression.

61. (Previously Presented) The method of Claim 55, wherein said cell is a prokaryotic cell.

62. (Canceled)

63. (Previously Presented) The method of Claim 61, wherein said cell is a bacterial cell.

64. (Previously Presented) The method of Claim 55, wherein said cell is a cell of an eukaryote.

65. (Previously Presented) The method of Claim 64, wherein said eukaryote is a vertebrate.

66. (Previously Presented) The method of Claim 64, wherein said eukaryote is a mouse.

67. (Previously Presented) The method of Claim 64, wherein said eukaryote is chimpanzee.

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68. (Previously Presented) The method of Claim 64, wherein said eukaryote is a human being.

69. (New) A method for inhibiting the expression of a target gene in a cell that expresses the targeted gene, comprising the steps of:

a) providing a composition comprising an mRNA-cDNA hybrid duplex prior to contacting said cell, wherein the mRNA-cDNA hybrid duplex is capable of inhibiting the expression of said targeted gene in said cell; and

b) contacting said cell with said composition under conditions such that the expression of said gene in said cell is inhibited,

wherein the mRNA is a ribonucleic acid sequence in the sense orientation of said targeted gene and the cDNA is a deoxyribonucleic acid sequence in the anti-sense orientation of said targeted gene, and wherein the mRNA is a full-length transcript of said targeted gene.

70. (New) The method of Claim 69, wherein the mRNA is an unspliced mRNA transcript of the targeted gene.

71. (New) The method of Claim 69, wherein the mRNA is a spliced mRNA transcript of the targeted gene.